TITLE: CENTER for Reproductive Sciences: Summary Impressions

The present pivotal status of The CENTER for Reproductive Sciences at College of Physicians and Surgeons of Columbia University is not unique. "Centers of Excellence" at many public and private institutions are currently vulnerable because of decreasing research support, increasing regulatory costs and potential caps on indirect cost allowances. Strong leadership, outstanding research and creative financing will be essential to the future survival of these Centers of Distinction.

Columbia University's CENTER for Reproductive Sciences has enjoyed outstanding leadership and research. Two decades of funding by the National Institutes of Child Health and Human Development for a specialized research center (P50) in reproductive medicine document this distinguished program that has focused on the areas of neuroendocrine and developmental biology. Other resources that contribute to the CENTER'S goals are: a general clinical research center, a protein chemistry core, a core to generate DNA probes, computer facilities for use in statistical analysis and a centralized facility in comparative medicine. These units will require creative mechanisms for generating future institutional funds. The latter of these units, the institute for comparative medicine, is an effort to consolidate animal resources and includes experimental surgery and diagnostic pathology under direction of a veterinarian. Such resources are essential in light of current complex regulatory guidelines for conducting research. However, these services are increasingly costly to the institution and their costs cannot be fully recovered by direct charges to grants, especially if the "user-pool" is relatively small--as is the current status at Columbia-Presbyterian Medical Center.

The specialized P50 Center grant, which has composed approximately 15-20% of the CENTER'S funds, was reviewed recently and its renewal is uncertain. Meanwhile the application has been refocused toward developmental biology and a significant portion of the earlier neuroendocrine research in non-human primates was reviewed and is likely to be funded via an R01 grant by Dr. Michel Ferin. This award will be testimony to the quality of this research in that less than 15% of all approved R01s are being funded presently. Unfortunately even those studies funded within NICHD are receiving 15 to 20% less than the amounts approved. These facts place added pressure on the CENTER'S key scientific investigators who will have to seek support from categorical institutes and from private sources. To facilitate investigative programs, core facilities in molecular cytology and cell culture have been available in the P50 grant, supported in major part by charges to investigators who utilize these services.

Scientifically, the current investments of the CENTER for Reproductive Sciences lie within developmental genetics, male and female gametogenesis and neuroendocrinology. This latter speciality has utilized non-human primates because of the similarities of their central nervous system to that of humans. This is expensive research and may appear, on first impression, removed from the other above specialities. Therefore if the CENTER is forced financially to downsize its scope, the impact of continuing neuroendocrine research as a component should be weighed--along with each of the other disciplines. The decision should not be made without carefully considering the following facts.

Firstly, the current team of neuroendocrine investigators are conducting outstanding science as evidenced by their publications and funding records. Secondly, this area of investigation is readily fundable from several categorical NIH institutes, i.e., mental health,

aging, general medical sciences and speciality branches like women's health. Thirdly, the excellence of the existing investigative team permit potential research projects through collaborative inter-institutional contracts. Fourthly, the developmental biology and gametogenesis groups may wish to utilize non-human primates in some research before extending their findings directly to human clinical applications. Finally, the role of non-human primates, if any, in meeting the goals of the Obstetrics and Gynecology department needs evaluation. These resources could be an asset in: (a) interwoven basic and clinical research activities; (b) diversification and expansion of departmental and institutional funding from private sources; and (c) conversion of knowledge in molecular medicine to treatments for various human diseases. Since molecular technologies are likely to receive preferential funding from both federal and private sources for the foreseeable future, this latter issue is highly relevant.

In summary, cost containment has placed huge pressures on medical research and more recently on clinical health delivery processes. Institutional administrators must be proactive, rather than reactive to these pressures. Historically it has been scientifically and financially correct for academic institutions to support existing productive programs and staff. Research, and ultimately society, will suffer if this cannot continue.

Respectfully submitted,

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